## **Recovery Plan Action Status**

Plan Name: Apalachicola Plants (4 spp.)

Plan Status: Final Plan Date: 22-Jun-94 Lead Agency: USFWS

Lead Office: Panama City Ecological Services Field Office 769-0552)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments

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Godfrey's butterwort (Pinguicula ionantha), Florida skullcap (Scutellaria floridana), White birds-in-a-nest (Macbridea alba), Telephus spurge (Euphorbia telephioides)	2	1.1	Management/monit oring in Apalachicola National Forest (AN)	Ongoing Current	FY 1995 - FY 1999		U.S. Forest Service	Management: General	Internal Field Assistance	Monitoring cost only. Management cost has not yet been determined. Management is an ongoing action conducted by the Forest Service. The ANF has a yearly 120,000+ acre prescribed burning program. According to L. Kirr (2009, pers. comm.), two to three compartments, i.e., management units, burned every year during the growing and dormant seasons. The ANF has an on-going timber-related management/monit oring study in the Hunt Timber Sale: pre- and post-harvest survey data have been collected in two sites (L. Kirn, 2009, pers. comm.). In addition, several years of monitoring data (e.g., documenting presence/absence in each population, and qualitative visual estimate of the density of white-birds-in-anest) have been collected in three permanent plots. However, these data were not available for evaluation.  Macbridea alba is found scattered under the Apalachicola National Forest Utility ROW of SR 65. Protective measures have been established with Talquin

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										Electric during annual maintenance and the upcoming pole replacement.
Telephus spurge (Euphorbia telephioides)	1	1.33	Euphorbia telephioodes surveys	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Private landowners, Florida Natural Areas Inventory	Research: Demographic Studies, Research: Population Surveys		FNAI surveyed Tyndall AFB. Surveys by private landowners are requested by FWS in range with submission of wetland permits for development.
										This is an ongoing action conducted primarily by the Service and FNAI. Botanical surveys have been conducted throughout the species, historical range including the following locations suggested by the Plan: St. Joseph Peninsul (No plants) Eglin Air Force Base (No plants) St. Joseph Peninsula State Park (No plants)
										In 2010 the PCFO botanist established permanent plots in each of three sites representing this species' range, and monitored 150 plants for growth (number and length of stems) and reproduction (inflorescence length, gender, fruit and seed production). Data will help evaluate the causes of endangerment and the solutions to ensure the continued survival of a species.

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Godfrey's butterwort (Pinguicula ionantha), Florida skullcap (Scutellaria floridana), White birds-in-a-nest (Macbridea alba), Telephus spurge (Euphorbia telephioides)	3	2.1	Develop a regional report on right-of- way management in coastal savannah regions	Not Started			U.S. Forest Service, The Nature Conservancy, Florida Department of Transportation, Contractor	Management: Habitat Maintenance and Manipulation	Contract	
Godfrey's butterwort (Pinguicula ionantha), Florida skullcap (Scutellaria floridana), White birds-in-a-nest (Macbridea alba), Telephus spurge (Euphorbia telephioides)	3	2.2	Experiment with right-of-way management	Not Started			Wildlife Service, U.S. Forest	Management: Habitat Maintenance and Manipulation	Internal Field Assistance	

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Godfrey's butterwort (Pinguicula ionantha), Florida skullcap (Scutellaria floridana), White birds-in-a-nest (Macbridea alba), Telephus spurge (Euphorbia telephioides)	2	3.1	Secure protection for the 4 plants outside AN	Ongoing Current	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Private landowners, Landowners and Managers	Acquisition	Internal Technical Assistance	Protections off of ANF for telephus spurge include: RGP and North Glades on PCB (St Joe easements) and Shallow Reed Site conservation easement in Gulf County. Other lands that at least one of these 4 include Tates Hell SF, Lathrop Island (BLM and St Joe private), Brenda Ward private landowners has a few skullcaps, St Joe Buffer Preserve has skullcaps, St Joe Buffer Preserve has skullcaps, or the skullcaps or protecting it through conservation easements is NOT included here.  This is an ongoing action. To date, about nine protected P. ionantha population on the St. Joseph Buffer Preserve (SJBP), Gulf County; one population (but potentially extirpated) at Box-R Wildlife Management Area (Box-R WMA), Franklin County; and seven populations at Tate?s Hell State Forest, Franklin County.
										populations of M. alba have been

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										secured: two populations on the St. Joseph Buffer Preserve (SJBP), Gulf County; one population at Lathrop Bayou, Bay County; one population at Box-R Wildlife Management Area (Box-R WMA), Franklin County; and six populations at Tate?s Hell State Forest, Franklin County. For S. floridana, 7 protected populations have been secured: three populations on the St. Joseph Bay State Buffer Preserve (SJBSBP), Gulf County; one population at Lathrop Bayou, Bay County; and three populations at Tate?s Hell State Forest (THSF), Franklin County. These are public lands and therefore, protected under the Endangered Species Act.
										To date, six protected populations have been secured for telephus spurge: four populations on the St. Joseph Buffer Preserve (Gulf County), and the North Glades and the Breakfast Point Mitigation Bank (BPMB) populations (Bay County).

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Godfrey's butterwort (Pinguicula ionantha), Florida skullcap (Scutellaria floridana), White birds-in-a-nest (Macbridea alba), Telephus spurge (Euphorbia telephioides)	2	3.3	Implement management and monitoring for protected sites outside ANF	Ongoing Current	Prior to FY 1995		Private landowners, Universities, Florida Department of Environmental Protection, Florida Department of Agriculture and Consumer Services, including Forestry Division, Landowners and Managers		Labor type not yet selected	Regular mgt occurs on Tates Hell, St Joe Buffer Preserve, St Joe lands in RGP, Brenda Wards property. No formal monitoring plans are in place that we are aware.
Godfrey's butterwort (Pinguicula ionantha), Florida skullcap (Scutellaria floridana), White birds-in-a-nest (Macbridea alba), Telephus spurge (Euphorbia telephioides)	3	5	Garden propagation and reintroduction	Ongoing Current	FY 2006	FY 2008	Botanical Gardens, U.S. Fish and Wildlife Service, Center for Plant Conservation	Research: Propagation	Labor type not yet selected	Ping is sold on open market. Contract with Historic Bok Tower initiated FY 06 for ex situ research and protection on spurge, skullcap, and butterwort. Birds in a nest already held in ex situ by HBok Sanctuary. Tested transplant occur with minimization measures on St Joe lands into conservation easement area with minimal success to date (drought in spring fy 2006 may be reason not more successful).  Although conserving M. alba in-situ is the best option, an ex-situ collection of established seedlings and adults is recommended.  Dr. Brenda Molano-Flores (Illinois Natural History Survey, Champaign, IL) and collaborators will be investigating seed germination requirements.